

=> d his

(FILE 'HOME' ENTERED AT 15:01:36 ON 26 JAN 2005)

FILE 'CAPLUS' ENTERED AT 15:01:58 ON 26 JAN 2005

L1 97460 S CORTICOSTEROID OR CORTICOSTERONE OR DEXAMETHASONE OR PREDNISO
L2 198853 S NICOTINE OR CANNABINOID OR AMPHETAMINE OR COCAINE OR CRACK OR
L3 589 S L1(S)L2
L4 463 S L3 NOT PY>=2001
L5 19 S PREDNISOLONE(S)L2

FILE 'MEDLINE, BIOSIS, EMBASE, SCISEARCH' ENTERED AT 16:05:44 ON 26 JAN
2005

L6 52 S L5
L7 41 S L6 NOT PY>=2000
L8 26 DUP REM L7 (15 DUPLICATES REMOVED)

=> s corticosteroid or corticosterone or dexamethasone or prednisolone or prednisone or prednylidene or triamcinolone or betamethasone paramethasone or fluorocortolone or deflazacort or cloprednol or fludrocortisone

20543 CORTICOSTEROID
41723 CORTICOSTEROIDS
47347 CORTICOSTEROID
(CORTICOSTEROID OR CORTICOSTEROIDS)
24963 CORTICOSTERONE
163 CORTICOSTERONES
25026 CORTICOSTERONE
(CORTICOSTERONE OR CORTICOSTERONES)
30935 DEXAMETHASONE
17 DEXAMETHASONES
30936 DEXAMETHASONE
(DEXAMETHASONE OR DEXAMETHASONES)
10330 PREDNISOLONE
93 PREDNISOLONES
10368 PREDNISOLONE
(PREDNISOLONE OR PREDNISOLONES)
5735 PREDNISONE
16 PREDNISONES
5736 PREDNISONE
(PREDNISONE OR PREDNISONES)
40 PREDNYLIDENE
3668 TRIAMCINOLONE
9 TRIAMCINOLONES
3670 TRIAMCINOLONE
(TRIAMCINOLONE OR TRIAMCINOLONES)
2879 BETAMETHASONE
4 BETAMETHASONES
2879 BETAMETHASONE
(BETAMETHASONE OR BETAMETHASONES)
190 PARAMETHASONE
1 PARAMETHASONES
191 PARAMETHASONE
(PARAMETHASONE OR PARAMETHASONES)
2 BETAMETHASONE PARAMETHASONE
(BETAMETHASONE (W) PARAMETHASONE)
11 FLUOROCORTOLONE
184 DEFLAZACORT
44 CLOPREDNOL
364 FLUDROCORTISONE

L1

97460 CORTICOSTEROID OR CORTICOSTERONE OR DEXAMETHASONE OR PREDNISOLONE OR PREDNISONE OR PREDNYLIDENE OR TRIAMCINOLONE OR BETAMETHASONE PARAMETHASONE OR FLUOROCORTOLONE OR DEFLAZACORT OR CLOPREDNOL OR FLUDROCORTISONE

=> s nicotine or cannabinoid or amphetamine or cocaine or crack or mdma or ecstasy

26218 NICOTINE
75 NICOTINES
26226 NICOTINE
(NICOTINE OR NICOTINES)
5237 CANNABINOID
4161 CANNABINOIDS
6089 CANNABINOID
(CANNABINOID OR CANNABINOIDS)
17883 AMPHETAMINE
1666 AMPHETAMINES
18356 AMPHETAMINE
(AMPHETAMINE OR AMPHETAMINES)
18659 COCAINE
45 COCAINES
18664 COCAINE
(COCAINE OR COCAINES)
100494 CRACK
55582 CRACKS
133228 CRACK

(CRACK OR CRACKS)

1301 MDMA

1 MDMAS

1301 MDMA

(MDMA OR MDMAS)

702 ECSTASY

L2 198853 NICOTINE OR CANNABINOID OR AMPHETAMINE OR COCAINE OR CRACK OR
MDMA OR ECSTASY

=> s 11(s)12

L3 589 L1(S)L2

=> s 13 not py>=2001

4204004 PY>=2001

L4 463 L3 NOT PY>=2001

TITLE: The role of **corticosteroids** in
nicotine's physiological and behavioral
effects

AUTHOR(S): Caggiula, Anthony R.; Donny, Eric C.; Epstein, Leonard
H.; Sved, Alan F.; Knopf, Steve; Rose, Christine;
McAllister, Cathy G.; Antelman, Seymour M.; Perkins,
Kenneth A.

CORPORATE SOURCE: Department of Psychology, University of Pittsburgh,
Pittsburgh, PA, 15260, USA

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AB This paper reviews evidence indicating that adrenal **corticosteroids** modulate the responsiveness of mice and rats to **nicotine**. Adrenalectomy increases, and both acute and chronic **corticosteroid** administration decrease, some of the physiol. and behavioral effects of **nicotine**. One function of adrenal steroids may be to regulate stress-induced changes in nicotine sensitivity. Another is to mediate the development of chronic tolerance when nicotine is given intermittently, and when the resulting tolerance has a learned component. A role of glucocorticoids in the development of tolerance to **nicotine** is suggested by the findings that a conditioned elevation of plasma **corticosterone**, which anticipates **nicotine** delivery, accompanies the development of chronic tolerance and that environmental cues evoke a conditioned **corticosterone** response, but only after they have become associated with **nicotine** delivery. The mechanisms by which adrenal steroids modulate nicotine sensitivity are not known, although recent in vitro evidence suggests that steroids can rapidly and reversibly reduce nicotinic receptor function. While most of the data are consistent with the hypothesis that **corticosteroids** reduce **nicotine** responsiveness, and thus promote a learned form of tolerance, there are new findings that **corticosteroids** increase the development of sensitization to the locomotor-activating effects of **nicotine**. These data suggest that formulations postulating a unidirectional effect of **corticosteroids** on **nicotine**'s actions (e.g. decreased sensitivity) must be revised to take into account interacting variables such as the specific **nicotine** effect being studied and whether that effect normally exhibits tolerance or sensitization. Finally, research is presented which indicates that the **corticosterone**-elevating effects of **nicotine**, previously reported for experimenter-administered drug, are also produced when **nicotine** administration is contingent on an operant response, and at a dose which sustains the development of **nicotine** self-administration in rats. These findings highlight the feasibility of using self-administration models in future explorations of the relationship between adrenal steroids and nicotine function.

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